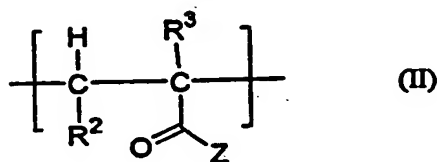


6. (Amended) The polymer according to claim 1, wherein R is hydrogen, R<sup>1</sup> is methyl.

7. (Amended) The polymer according to claim 1, wherein the polymer is a homopolymer.

8. (Amended) A polymer according to claim 1 comprising the unit (II)



wherein R<sup>2</sup> is selected from hydrogen, C<sub>1</sub>-C<sub>18</sub> alkyl, C<sub>1</sub>-C<sub>18</sub> alkenyl, C<sub>1</sub>-C<sub>18</sub> aralkyl, C<sub>1</sub>-C<sub>18</sub> alkaryl, carboxylic acid and carboxy-C<sub>1-16</sub> alkyl; R<sup>3</sup> is selected from the group consisting of hydrogen, methyl, ethyl, propyl, butyl, pentyl and isomers thereof, Z is a pendent group selected from the group consisting of NR<sup>4</sup>R<sup>5</sup>, SR<sup>6</sup> and OR<sup>7</sup>, wherein R<sup>4</sup> is an acyl group, preferably an aminoacyl group or oligopeptidyl group; R<sup>5</sup> is selected from hydrogen, C<sub>1</sub>-C<sub>18</sub> alkyl, C<sub>1</sub>-C<sub>18</sub> alkenyl, C<sub>1</sub>-C<sub>18</sub> aralkyl, C<sub>1</sub>-C<sub>18</sub> alkaryl; R<sup>6</sup> and R<sup>7</sup> are selected from the group consisting of hydrogen, C<sub>1</sub>-C<sub>12</sub> alkyl, C<sub>1</sub>-C<sub>12</sub> alkenyl, C<sub>1</sub>-C<sub>12</sub> aralkyl, C<sub>1</sub>-C<sub>12</sub> alkaryl, C<sub>1</sub>-C<sub>12</sub> alkoxy and C<sub>1</sub>-C<sub>12</sub> hydroxyalkyl, and may contain one or more cleavable bonds and may be covalently linked to a bioactive agent.

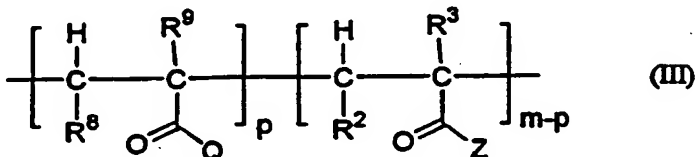
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10. (Amended) A polymer according to claim 8 comprising the unit (II) wherein R<sup>2</sup> is hydrogen, C<sub>1</sub>-C<sub>18</sub> alkyl, C<sub>1</sub>-C<sub>18</sub> alkenyl, C<sub>1</sub>-C<sub>18</sub> aralkyl, C<sub>1</sub>-C<sub>18</sub> alkaryl, R<sup>3</sup> is selected from the group consisting of hydrogen, methyl, ethyl, propyl, butyl, pentyl and isomers thereof, Z is a pendent group NR<sup>4</sup>R<sup>5</sup>, wherein R<sup>4</sup> is an acyl group, preferably an aminoacyl group or oligopeptidyl group; R<sup>5</sup> is selected from hydrogen, C<sub>1</sub>-C<sub>8</sub> alkyl, C<sub>1</sub>-C<sub>12</sub> alkenyl, C<sub>1</sub>-C<sub>12</sub> aralkyl, C<sub>1</sub>-C<sub>12</sub> alkaryl; and wherein the polymer has a molecular weight (Mw) of less than 50,000.

A2  
unit

11. (Amended) A polymer according to claim 8 wherein (II) is linked to a bioactive agent and the bioactive agent is a drug.

13. (Amended) A polymer according to claim 8, wherein the polymer has the structure (III)



wherein  $\text{R}^8$  and  $\text{R}^9$  are selected from the same groups as  $\text{R}^2$  and  $\text{R}^3$  respectively, Q is a solubilising group selected from the group consisting of  $\text{C}_1\text{C}_{12}$  alkyl,  $\text{C}_1\text{C}_{12}$  alkenyl,  $\text{C}_1\text{C}_{12}$  aralkyl,  $\text{C}_1\text{C}_{12}$  alkaryl,  $\text{C}_1\text{C}_{12}$  alkoxy,  $\text{C}_1\text{C}_{12}$  hydroxyalkyl,  $\text{C}_1\text{C}_{12}$  alkylamido,  $\text{C}_1\text{C}_{12}$  alkylimido,  $\text{C}_1\text{C}_{12}$  alkanoyl, and wherein m and p are integers of less than 500.

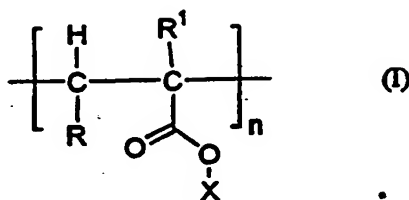
A4

17. (Amended) The process according to claim 15, wherein the process additionally comprises a solvent, an Atom Transfer Radical Polymerization initiator selected from alkylhalides, preferably alkylbromides, and a mediator which comprises a  $\text{Cu(I)Br}$  moiety complexed by a chelating ligand, preferably the mediator being selected from  $\text{Cu(I)Br(Bipy)}_2$ ,  $\text{Cu(I)Br(Bipy)N}$ ,  $\text{Cu(I)Br(N, N', N'', N''-pentamethyldiethylenetriamine)}$ ,  $\text{Cu(I)Br[methyl}_6\text{ tris(2-aminoethyl)amine]}$  and  $\text{Cu(I)Br(pentamethyldiethylene)}$ .

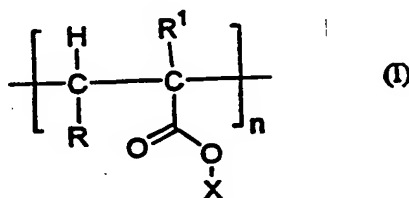
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24. (Amended) A process according to claim 22, wherein E is selected from the group consisting of N-succinimidyl, pentachlorophenyl, pentafluorophenyl, para-nitrophenyl, dinitrophenyl, N-phthalimido, N-norbornyl, cyanomethyl, pyridyl, trichlorotriazine, 5-chloroquinilino, and imidazole, preferably N-succinimidyl or imidazole, most preferably N-succinimidyl.

25. (Amended) A process according to claim 23, wherein the polymer of formula (VI) is a polymer of formula (I)



26. (Amended) A process according to claim 22, wherein the polymer of the formula (I)



is reacted in a second step with a reagent  $\text{HR}^x$  as defined in claim 22, whereby at least some of the groups  $-\text{OX}$  are replaced by  $-\text{R}^x$  in the product derivatised polymer.

27. (Amended) A process according to claim 26, wherein  $\text{HR}^x$  is  $\text{H}_2 \text{NR}^{14}$  preferably  $\text{NR}^{14}$  being an N-aminoacyl or N-oligopeptidyl group.

28. (Amended) A process according to claim 27, wherein  $\text{R}^x$  comprises one or more aminoacyl groups, preferably 2 to 6, most preferably 4 aminoacyl groups.

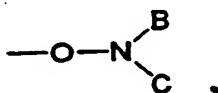
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29. (Amended) A process according to claim 28 wherein R<sup>x</sup> comprises a bioactive agent, preferably an anti-cancer drug.

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Cont, 30. (Amended) A process according to claim 29, comprising the additional step of reacting the unreacted groups, OE or OX groups, with a solubilising group selected from the group consisting of C<sub>1</sub>-C<sub>12</sub> alkyl, C<sub>1</sub>-C<sub>12</sub> alkenyl, C<sub>1</sub>-C<sub>12</sub> aralkyl, C<sub>1</sub>-C<sub>12</sub> alkaryl, C<sub>1</sub>-C<sub>12</sub> alkoxy, C<sub>1</sub>-C<sub>12</sub> hydroxyalkyl, C<sub>1</sub>-C<sub>12</sub> alkylamido, C<sub>1</sub>-C<sub>12</sub> alkylimido, C<sub>1</sub>-C<sub>12</sub> alkanoyl.

AC 34. (Amended) A process according to claim 31, wherein step B is a Controlled Radical Polymerisation process, preferably one in which polymer of the structure (XV) has one terminal group A and one terminal group



35. (Amended) The polymer as defined in claim 1, for use in a method of manufacture of a medicament, preferably for the treatment of cancer.

36. (Amended) A composition comprising a polymer as defined in claim 1 and a pharmaceutically acceptable excipient.

37. (Amended) Use of a polymer as defined in claim 1 as an excipient.